

TECHNICAL NARRATIVE

This Technical Statement and attached exhibits were prepared on behalf of Heftel Broadcasting Company LLC (“Heftel”), licensee of KHYZ, Channel 259B, Facility ID No. 34555, Mountain Pass, California. Heftel herein proposes to modify the license of KHYZ to change the transmit antenna and operate with a directional antenna.

Heftel is proposing to implement this change at an existing tower site; no modifications to the tower are being made. As such, the Federal Aviation Administration will not be apprised of this proposal. The coordinates of the proposed application site are 35° 29' 26.9" North Latitude, 115° 33' 29.9" West Longitude (NAD 83). The existing tower is 49 meters in overall height and is not registered with an Antenna Structure Registration (“ASR”) number.

The KHYZ application site is mutually exclusive with the KHYZ licensed site. The application site Channel Study for KHYZ on Channel 259B shows it is fully spaced to all full power FM station licenses and applications.

Note that pursuant to a waiver of 47 C.F.R. Section 73.211, the FCC permitted KHYZ to increase its facilities from 2.3 kilowatts (“kw”) at 521 meters (“m”) height above average terrain (“HAAT”) to 10 kw at 522 m. *See* FCC File No. BPH-820714AB. This waiver grant allowed station KHYZ to extend its 1.0 mV/m contour from 49.0 km to 63.6 km, which is beyond the 52.2 km Class B reference distance. Thereafter, KHYZ was authorized to provide service to 63.6 km, but with slightly altered facilities: 8.4 kw at 551 m HAAT. *See* FCC File No. BLH-960313KB. Pursuant to the Report and Order, *Amendment of Section 73.202(b), Table of*

Allotments, FM Broadcast Stations (Indian Springs, Nevada, Mountain Pass, California, Kingman, Arizona, and St. George, Utah), 14 FCC Rcd 10568 (Chief, Allocations Branch 1999) (the “Report and Order”), the FCC modified the license for KHYZ to specify operation on Channel 259B (99.7 MHz) in lieu of Channel 258B (99.5 MHz). Specifically, the Report and Order stated (at ¶ 24):

IT IS FURTHER ORDERED, That pursuant to Section 316(a) of the Communications Act of 1934, as amended, the license of KHWY, Inc. for Station KHYZ, Mountain Pass, California, IS MODIFIED to specify operation on Channel 259B in lieu of Channel 258B and to use their current, Class B superpower facilities (8.4 kilowatts effective radiated power and antenna height of 551 meters above average terrain).

The change in KHYZ’s channel from 258B to Channel 259B was licensed in FCC File No. BMLH-20020228ADC.

The proposed KHYZ facility would continue to operate with 8.4 kW ERP at 44 meters above ground level and 551 meters HAAT, but with a directional antenna. There would be no change in the ERP or transmit antenna center of radiation height above ground level. Mountain Pass is unincorporated and therefore there is no legal boundary. The Section 73.315 exhibit depicts an estimated boundary for Mountain Pass. The most distant point of the estimated boundary is only four kilometers from the transmit tower location. The proposed KHYZ FCC F(50,50) 70 dBu contour easily reaches 100 percent of the Mountain Pass.

A study has been undertaken and an exhibit included demonstrating that the proposed KHYZ facility is in compliance with the Commission's environmental and radio frequency emission limits.

KHYZ Application Site Channel Study

REFERENCE								DISPLAY DATES	
35 29 26.9 N.		CLASS = B Int = B						DATA	07-07-23
115 33 29.9 W.		Current Spacings to 3rd Adj.						SEARCH	07-10-23
----- Channel 259 - 99.7 MHz -----									
Call	Channel	Location			Azi	Dist	FCC	Margin	
Lat.	Lng.	Ant	Power			HAAT			
KHYZ	LIC 259B	Mountain Pass	CA	0.0	0.0	240.5	-240.5		
35 29 26.9	115 33 29.9	CN	8.400 kW		551 M				
	Heftel Broadcasting Compan BMLH20020228ADC								
KHYZ-FM2	LIC-D 259D	Las Vegas	NV	42.5	68.7	111.5	-42.8		
35 56 43.9	115 02 33.9	DCN	0.170 kW	0 M					
	Heftel Broadcasting Compan 0000125550								
K261BZ	LIC-D 261D	Las Vegas	NV	7.2	45.0	53.5	-8.5		
35 53 33.9	115 29 43.0	DHN	0.165 kW		560 M				
	Low Potosi, LLC BLFT19880429TA								
KRGT	LIC 257C2	Sunrise Manor	NV	40.6	76.2	73.5	2.7		
36 00 34.9	115 00 23.0	CN	8.800 kW		351 M				
	Latino Media Network, LLC 0000136549								
R000021	RUL 256A	Tecopa	CA	303.5	72.1	68.5	3.6		
35 50 47.9	116 13 30.1		0.000 kW		100 M				
R18321	ADD 256A	Tecopa	CA	303.5	72.1	68.5	3.6		
35 50 47.9	116 13 30.1		0.000 kW		100 M				
	From CDBS								
KHSJ-LP	LIC 261L1	Las Vegas	NV	31.4	80.2	66.5	13.7		
36 06 23.2	115 05 34.5	CN	0.030 kW		54 M				
	Radio Paradise, Inc. BLL20150122AAA								
KNPR	LIC 205C	Las Vegas	NV	5.6	52.9	34.5	18.4		
35 57 54.9	115 30 01.8	CN	22.000 kW		1190 M				
	Nevada Public Radio BLED20070424AAW								
DKHWZ	ALO 261B1	Ludlow	CA	210.9	90.3	70.5	19.8		
34 47 31.0	116 03 59.0		0.000 kW		100 M				
	Khwy, Inc.								
KEOT	ALO 260C	St. George	UT	50.3	239.2	216.5	22.7		
36 50 48.9	113 29 30.8		0.000 kW		600 M				
KONY	LIC 260C	St. George	UT	50.3	239.2	216.5	22.7		
36 50 48.9	113 29 30.8	CN	89.000 kW		620 M				
	Canyon Media Corporation BLH20120315AAA								
KONY	CP 260C	St. George	UT	50.2	239.3	216.5	22.8		
36 50 59.0	113 29 34.0	CN	89.000 kW		600 M				
	Canyon Media Corporation 0000121666								
K261ES	LIC-D 261D	Las Vegas	NV	19.9	78.6	53.5	25.1		
36 09 22.1	115 15 35.0	DVN	0.040 kW	0 M					
	Las Vegas Broadcasters, In BLFT20180927ABY								

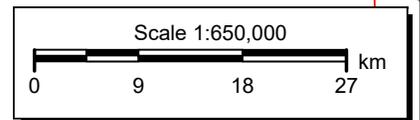
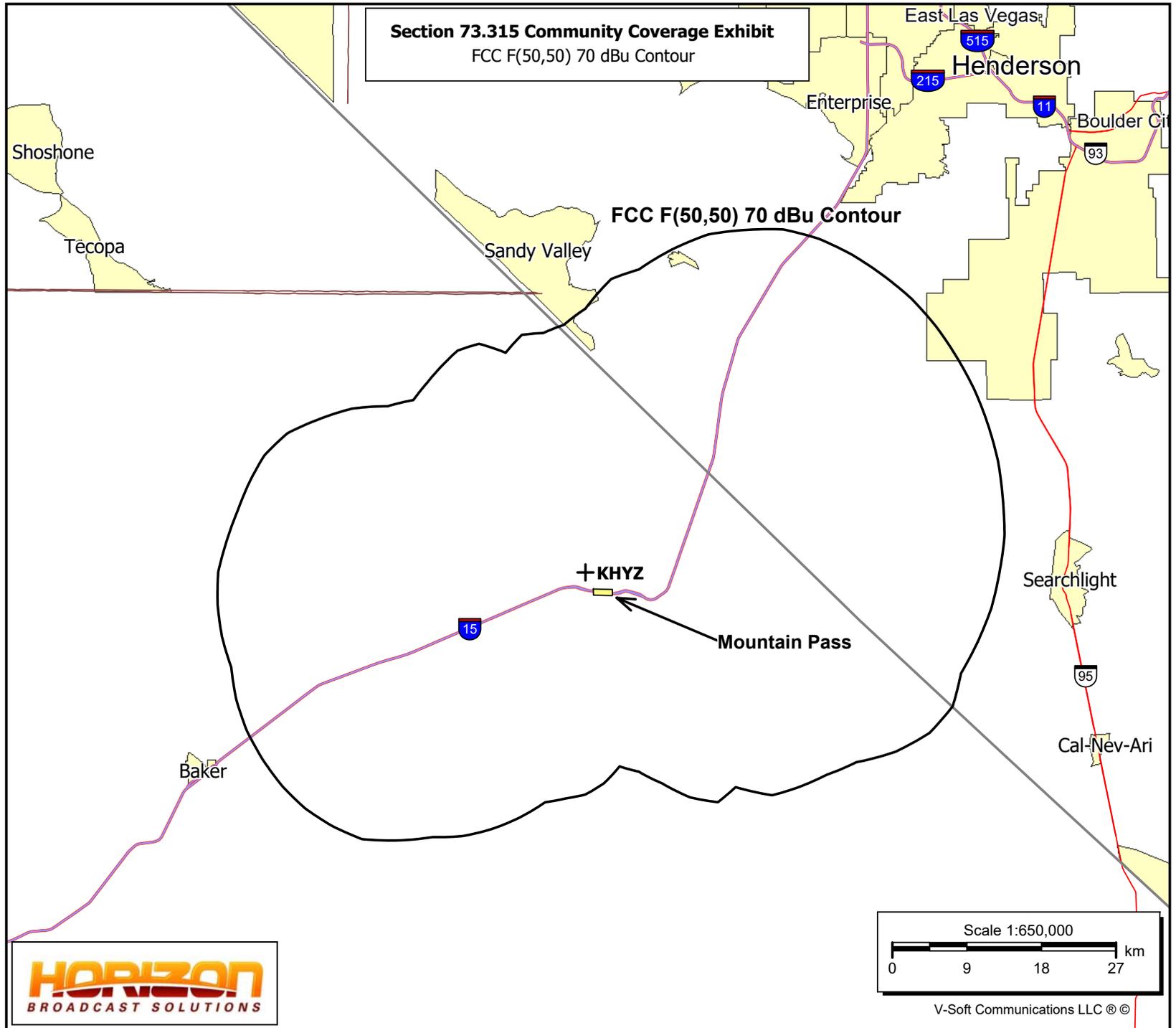
Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
K257FM	LIC-D 257D	Laughlin		NV 109.9	78.9	53.5	25.4
35 14 47.9	114 44 34.8	DCN	0.250 kW	0 M			
	Cameron Broadcasting, Inc.		BLFT20140724ACH				
NEW	CP -N 261B1	Ludlow		CA 212.0	102.2	70.5	31.7
34 42 34.0	116 09 05.0	NCN	6.500 kW		84 M		
			0000159173				
KHWG-FM	LIC-D 261C3	Crystal		NV 337.5	116.9	70.5	46.4
36 27 44.8	116 03 36.1	DHN	1.800 kW		232 M		
	President Of The Liberty C		BLH20130510ADD				

KHYZ

Mountain Pass, CA
Latitude: 35-29-26.90 N
Longitude: 115-33-29.90 W
ERP: 8.40 kW
HAAT: 551.0 m
Channel: 259
Frequency: 99.7 MHz
AMSL Height: 1864.0 m
Elevation: 1820.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

Section 73.315 Community Coverage Exhibit

FCC F(50,50) 70 dBu Contour



V-Soft Communications LLC ©

**Human Exposure to Radiofrequency Electromagnetic Field
&
Section 106 Compliance
(Environmental)**

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. 1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. Heftel Broadcasting Company LLC ("Heftel"), licensee of KHYZ, Channel 259B, Facility ID No. 34555, Mountain Pass, California, seeks to modify the license of KHYZ by operating with a directional antenna. The transmitting site will be an existing tower 49 meters in overall height and is not registered with an Antenna Registration ("ASR") number. The tower is located at 35° 29' 26.9 N ~ 115° 33' 29.9" W (NAD 83). The proposed antenna is a side mounted PSI Model PSIFM-3E-90WS-DA three bay 0.9 wave spaced directional antenna with a center of radiation of 44 meters AGL. KHYZ will operate with 8.4 kW ERP at 551 meters HAAT. Because KHYZ proposes to operate from an existing tower and no modifications are being made to the tower, it is believed to be exempt from a Section 106 review by the SHPO/THPO.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The PSI antenna is included in the Commission's FM Model for Windows program under EPA Element Type 2, Opposed "V" dipole. Using EPA Element Type 2 as the EPA Element, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 25.803 $\mu\text{W}/\text{cm}^2$ at 14 meters, which is 12.902 percent of the general population/uncontrolled maximum permitted exposure limit.

The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

FM Model

Radio Frequency Safety

FCC Policy on Human Exposure

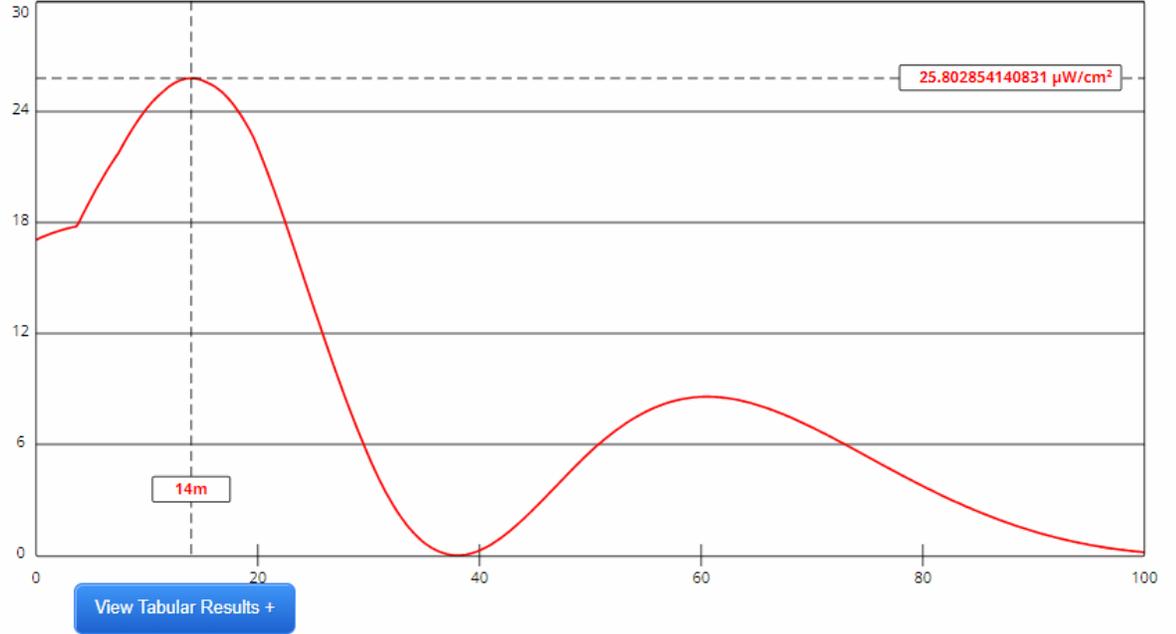
RF Safety Highlighted Releases

RF Safety FAQ

FM Model

Body Tissue Dielectric Parameters

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data [published in 1985 by the EPA](#). [Show More....](#)



Channel Selection	Channel 259 (99.7 MHz) ▼		
Antenna Type +	EPA Type 2: Opposed V Dipole ▼		
Height (m)	44	Distance (m)	100
ERP-H (W)	8400	ERP-V (W)	8400
Num of Elements	3	λ	0.9
Num of Points	500	Apply	